



JUNE 1987

COLORADO SPRINGS,
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PIKES PEAK RADIO AMATEUR ASSOCIATION, INC.

P.O. Box 16521
Colorado Springs, CO 80935

FIRST CLASS MAIL



Ø BEAT



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The Pikes Peak Radio Amateur Association meets on the second Wednesday of each month at Giuseppe's Depot Restaurant at 10 S. Sierra Madre at 7:30 p.m. All amateurs and interested parties are invited to attend.

Editor: Phil Somers VE1ARC, 1075 Allegheny Dr. Colorado Springs, CO 80919 590-7136

Donation improves radio communication system

Saint Francis Hospital has contributed \$150 to improve the communication system among regional amateur radio operators during emergencies.

The donation was used by the Pikes Peak Radio Amateur Association to purchase cable and an antenna, which were placed atop the hospital by Larry Rice, consulting electronics engineer for Saint Francis, and Dr. Richard Stienmier, Pathologist. Both Rice and Stienmier are Amateur Radio ("Ham") operators.

The system, which covers the entire Colorado Springs area and to the east as far as Limon, has been operational for more than a year at Saint Francis. Similar antenna systems have subsequently been placed in all



Dr. Richard Stienmier operates radio

but one of the other military and civilian hospitals in town.

"It worked out very nicely during the Red Tag Gas Co. fire (in October 1986) to find out what casualties were expected and how many people were possibly coming over to the hospital," said Stienmier, medical director of Saint Francis' Blood Bank.

"We were able to get exact information on what was going on."

The communication dispatch area is located in Stienmier's office adjacent to the Emergency Department. "Being close to the ER and not in it is real handy," he said.

During emergencies, the system becomes part of the Amateur Radio Emergency Service, which is sponsored by the American Radio Relay League, an international organization of radio amateurs of the U.S. and Canada.

The system also has been used during city-wide emergency training exercises and for the coordination of four-wheel-drive vehicles bringing staff to and from the hospital during major snowstorms.

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JUNE MEETING

The next regularly scheduled meeting of the Pikes Peak Radio Amateur Association will be held on Wednesday, June 10 at 7:30 PM at Giuseppe's Depot at #10 S. Sierra St. The program will feature Field Day and Pikes Peak Hill Climb.

"VIEW FROM THE PEAK"

by George Hinds, N8CIX

"ON THE ROAD AGAIN! IT CAN BE A LONG WAY FROM HERE TO THERE -- AND BACK"

All long trips by auto are but a series of short trips - and this was no different. Our objectives were to visit family in Iowa and Michigan, our amateur radio friends in the Cleveland, Ohio area, plus the Dayton Hamvention, then Louisville, KY, for a reunion of one of my World War II outfits, then to eastern North Carolina to visit an ill buddy from my working days and, of course, to take in some of the sights along the way. Well, that series of "short trips" added up to 8,500 miles.

THE DAYTON HAMVENTION - WOW!

Again - a smashing success; depending on the source, estimates were giving attendance figures of 25,000+. One of the drawing cards: prizes and more prizes -- \$66,500 worth of prizes! Icom, Kenwood and Yaesu were the top 3 in prize donations - and then Icom did it up right for the finale - they gave a prize certificate good for the newest Icom multi-band transceiver: the trunk mounted, 6 band (10, 6, 2, 220, 440, & 1.2 GHz) modular unit with control head remoted controller.

As usual, the Hamvention hosts its share of different-appearing creatures: the small group who wore safety helmets topped by UHF quads for DF'ing who knows what; the mass of hams wearing hat-clip mounted antennas to their belt mounted walkie-talkies (it was an idea they said really worked - eliminated receiver fading from body capacitance.) Then there were the hundreds equipped with 2-meter HT's that seemed to suffer from permanent "open squelch" in the high RF environment - some racket!

Perhaps for the first time counterfeit tickets made an appearance and possibly some hams were suckered into buying them. However, they were discovered early when the gates opened and no prizes were awarded for such. Local radio and TV stations cooperated in spreading the word about the counterfeits and how they could be identified, and possibly this killed the sale of the bogus tickets.

For the first few hours on Friday after opening, rain kept the crowds in-

side the arena buildings and away from the mammoth flea market. It was wall-to-wall humanity for those whose desire to see what the dealers and distributors had on display (and to snap up at bargain prices that piece of ham gear they'd been waiting for) overcame a dislike of crowds.

From Dayton: on to Cleveland to attend the monthly dinner meeting of my Ohio repeater club (Lake Erie Amateur Radio Association) and a meeting of the Westpark Radiops, the club largely responsible for my becoming an amateur radio operator. Sure, these were wonderful events for me - old friendships renewed, new friends made.

The wife and I also enjoyed two luncheon meetings while in Cleveland - with a dozen fellows of the "Geritol Net" (no, they're not so old as to be dependent on that tonic - it's a nickname that took hold because so many are retirees) and also with the local chapter of the Quarter Century Wireless Association in honoring one who now has 75 years of amateur radio operating on the books - W8BU, Jim Russell. Still active on 2M and 20M, Jim received his first call before licenses were issued: AL. Calls were assigned in alphabetical order then beginning with AA. He was the 12th ham to obtain a call in the United States. Licenses were cancelled during World War I; after the war he was issued 8BU which subsequently became W8BU when prefixes were added later.

Long active in the ARRL, perhaps the most historic event Jim participated in (and which he displays on his QSL card) was the event in December of 1921 when Jim, along with 25 other U.S. stations, was copied in Scotland by Paul Godley, sent overseas by the ARRL, to establish the first trans-Atlantic contact by wireless. It happened that Jim, in Cleveland, Ohio, was farthest from Scotland of all. Jim's wife, Eila (W8EBS) and brother Dave (N8DR) are also licensed, as are other family members. Never one to miss the opportunity to bring new folks into ham radio, Jim was active in teaching amateur radio for many, many years. Truly a story I'm proud to relate, a friend I'm proud to have.

Amateur radio over the miles sure

is an entertaining means of making distances seem shorter, of turning miles into smiles. You may also learn, as I did, of the ways that amateurs find to serve the public convenience and necessity. I learned that Kearney, NE., has a fine UHF repeater that is linked to the 2M system. The county sheriff is also on UHF. In times of severe weather or other crisis, every sheriff unit can be listening to what the hams are reporting to the amateur net control station because the ham UHF receive frequency is programmed into the UHF rigs of the sheriff. Amateurs in a position to provide information, either via 2M or UHF repeater, may be listened to by police just as would be the case with scanners.

At Dayton, the Farout Amateur club took to the air - in more ways than by radio - to promote their club and the hospitality party they sponsored. Yes, they hired an old biplane to tow a banner over the Hamvention site! On Friday, the wind was so strong that it seemed as if the biplane was more like a helicopter - it almost hovered over one spot because of headwinds.

Not one to miss out on public service projects when the opportunity presents, I found myself in Cleveland for one of the major marathons scheduled annually: the Cleveland Revco event that includes a full marathon and a 10K race. This year the runners numbered about 12,000, the weather was warm and humid, and the calls for medical assistance were numerous. Amateur radio again came through in creditable manner.

While in North Carolina, we found ourselves passing near Elm City, the scene of a train derailment a few hours before we arrived. A carload of acid sprung a leak, necessitating evacuation of almost 3,000 people to shelters set up hurriedly by the Red Cross.

The 28/88 repeater in Raleigh NC was serving as the link between the 16/76 Wilson (Elm City) repeater and state emergency headquarters, while the Wilson system was handling traffic for the county and the Red Cross at and near the site of the derailment and the evacuation centers. Amateurs had set up control stations at both the county building and the Red Cross. As the wife and I drove into the area, it became painfully evident that hams were needed fast, but as it was a weekday, responses to calls for assistance were sparse.

Under such circumstances, we felt a delay in our trip was warranted. I checked in with net control and offered myself and equipment, mobile and HT. In about an hour, when local help still was not forthcoming, I was pressed into service providing communications at a high school in Wilson being used as one of three evacuation centers. Needless to say, with phone lines overwhelmed, ham radio was welcomed with open arms. Local and national news reporters were on the scene, with camera crews and helicopters coming and going.

During the 6 hours I was on the job, I was interviewed several times by newspaper and TV. Each time I stressed that we volunteers were amateur radio operators. The story got across, for later that night I saw and heard myself described as a "volunteer amateur radio operator" during a segment where I was shown with HT in action for about 45 seconds on TV. They had taped me during a time when I was relaying instructions to the personnel at the evacuation site as to the status of the entire project and the possible return of the evacuees to their homes. Hopefully, it, along with the efforts of other amateurs involved, presented amateur radio in a favorable view to the people of North Carolina.

A few more notes on Hamvention 87: Friday was a night of parties (amateur orgies?) for a dozen or more groups with hospitality rooms everywhere. The ticket numbers being drawn for prizes numbered in the 27,000 series. Saturday afternoon found some dealers out of stock on some items. One dealer in the flea market was selling old radar guns for \$10 and 200 were sold fast - what will they use them for? You guess... One manufacturer sold over a million dollars worth of gear in the 3 days. This year UPS had a packing/shipping booth so that hams could ship their purchases home instead of carrying them aboard public transportation. DARA had a test bench set up so that new gear could be powered up and tested on the spot. Finally, the Hara Arena plans on a 40,000 square foot expansion, hopefully to be ready next year!!! - 73 -

Congratulations Pete

The winner of the ICOM 735 HF transceiver at the SwapFest was Pete N9LA. Everyone was in agreement that it couldn't have gone to a more deserving person. Pete does a tremendous amount of great work for the club and it was delightful to see him win the grand prize.

VHF & ABOVE NEWS

by NKØP

Now that Dayton is history this year and our Swapfest is over its time to gear-up for the June VHF Contest. The contest runs from June 13th 1800 UTC to June 15th 0300 UTC. This will be the first year Novices can play in the VHF contests. All other rules remain the same as last years. Details are on page 86 of May QST. I know of at least one station that will be mobile moving through Grids in northern New Mexico and Eastern Colorado. Unfortunately I'll be out of town for most of the contest but plan to be on Trail Ridge Road (DN70) on Sunday.

Our Club ranked 6th in the Local category in the January VHF Sweepstakes. (see page 75 June QST)

Many thanks to all who helped in that effort. Don't forget the VHF station on Field Day! Contact Al NOCMW with ur help and ideas on how to rack up a big score!

The Front Range Microwave Group has not set a date for the next meeting so if ur interested catch me at Saturday breakfast or the club meeting for the latest details.

The 50MHZ sprint this month was dismal. I heard nothing but locals despite the fact the 50MHZ has been open quite a lot recently. The bright spot was that 2 meters had good tropo enhancement to the east that same nite and Wichita, Kansas was coming in loud and clear (WBOHYV and KFOM) You really have to monitor the band to catch these fleeting openings this one only lasted about 20min.

I have not heard any reports of increased 220MHZ activity so I don't have anything to report in that category.

The SMIRK QSO party will be held on June 19 and 20. For info and logs send SASE to KA0NNO Lisa Lowell Box 547 Hugo, CO. 80821

25 Years ago this month the FCC agreed with the ARRL proposal to restore the full one kilowatt limit on the 420MHZ band.

The Central States VHF Conference will be in Arlington, TX July 24-26. This conference has a very gud reputation and would be an interesting summer trip for the "serious" VHFer. For info send a large SASE to Al Ward WB5LUA RTE 9, Box 132 McKinney, TX 75069

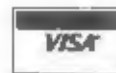
Thats news for this month.

73s and C U on the bands...Ron NKØP

QST QST QST

WIN! ICOM 2AT????????

An ICOM 2AT Handi-Talkie will be raffled off at our annual club picnic! Tickets are 5



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available starting June 1st from Ron NKØP at Saturday breakfasts or at the June and July club meetings for \$1 each. You need not be present to win. If we can break even on tickets sales we will plan for another major prize to be given away at the Christmas Party.

List of Winners at PPRAA 1987 Swapfest

Pete LaFosse	Grand Prize Winner ICOM 735 HF Transceiver
Bud NØDDF	Repeater Directory
Don KEØBJ	Boldering iron, stand, solder
Rick Meyer	MFJ 24 hour LCD Clock
Dick Brinkhaus	QSL Cards
Doug Brower	Two rolls of Coax Seal
Rick Meyer	Electronic Project Handbook
C. Wolfe NØFPQ	Solder Sucker
J.R. Dunlap	50' RGB Coax with connectors
Sparky Lee	Antenna Center & Connectors
M. McCandless	Repeater Directory
Jake NØCYR	Test Leads (DEM Parts)
Faye Harren	Test Leads (DEM Parts)
Rose Bellville	QSL Cards
Will Zimmerman	ARRL Handbook
Connie Streamer	ARRL Handbook (Jess Miley)
Les Borst	ARRL Field Dir. (anon. donor)
Lee Martin	Custom Leather Belt Buckle (D & M Leathercrafters)

ANTENNAS
By Chris Smith
NXØE

Recently I found myself in need of a base station antenna for the two meter rig. A multi-element beam and a rotor seemed to be like the way to go but it just wouldn't meet all the requirements, especially the one that specified "cost under \$10 plus reasonable time and effort."

For all-round communications (literally) I wanted an omnidirectional antenna. A vertical antenna would do that nicely, and be correctly polarized for local FM use. A vertical ground plane antenna would have been simple to build and easy to match to 50 ohm coax - just vary the length for resonance and adjust the angle of the ground plane radials for 50 ohms. It could be designed on the computer and on the air in no time.

But it just didn't meet the requirements. After all, there was THE PROBLEM, the sort that is found in the minds of worriers like me. THE PROBLEM was lightning - after I saw a 50 foot tree within 100 yards of the house get split from top to bottom, I resolved to give THE PROBLEM the respect it deserved. And it deserved better than a vertical ground plane antenna (read - lightning rod) sitting on top of the house. After all, to properly feed the ground plane, the vertical is connected to the inner conductor of the coax and the shield connects to the radials. The lightning will likely hit the vertical and get into the inner conductor - at least before it vaporizes the insulation (and your rig). Ideally I would like the lightning to hit whatever is connected to the shield of the coax. My coax has its shield connected to an external ground - yours should too!

Given a low impedance ground lead, and a lot of luck, the strike would bypass the innards of the rig. I still wouldn't want to be talking on it when the lightning hit, and the antenna should be grounded when not in use (yours isn't it?) but to minimize lightning damage, antennas should offer a low impedance path from the point most likely to be hit to an external ground.

After some thought I decided on a J-pole. The J-pole antenna is a half wave vertical antenna, fed at the end by a vertical quarter-wave section of transmission line. The transmission line is open at the upper end, with one side attached to the half-wave radiator, and the other end is shorted. An end fed half-wave is a very high impedance, as is the open end of a quarter-wave shorted transmission line. The shorted end is zero impedance, and so the transmission line is acting as a transformer. If the halfwave radiator is resonant, then somewhere along the transmission line (about 0.025 wave from the short) the impedance will be 50 ohms resistive. The coax feeder can be tapped to the antenna at this point and a low VSWR will result.

Most importantly, the long side of the J-pole can be attached to the shield of the coax. The inner conductor is taped across to the other side of the J, which incidentally, is at DC ground with respect to the shield. That's always a good idea, to prevent wind generated static from discharging through your rig.

The antenna is now under construction. So far I'm in \$3.00 in materials- for a 10 foot piece of 1/2 inch copper pipe. Of course I still have to make a mounting for it- but I've got 70% of my budget left to handle that!

Product Review - PK232
by Jim WA9ABB

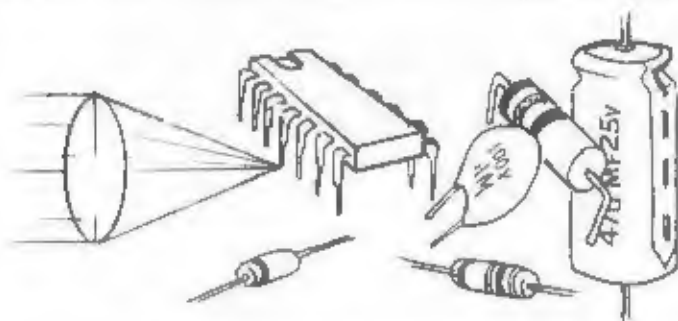
AEA's new PK-232 (Pakratt 232) is a dandy do-it-all-in-one box. It operates both hf and vhf packet, RTTY, CW, ASCII, and AMTOR. The latest version will also print out weather fax maps on Epson compatible printers. The PK232 is priced in the \$290 to \$315 range depending on how carefully you shop.

The unit is designed to interface with any computer or terminal unit with a standard RS-232 interface. Almost any standard terminal program should work with your computer and the PK232. A very thick, comprehensive operator's manual comes with the 232. It is somewhat difficult to get the hang of the commands, even for someone who is familiar with packet operation.

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The only mode I have not yet tried is the weather fax. The other modes all work great once you learn how to set up the parameters. The unit is operated pretty much like a standard packet tnc. To get into any mode, you have to put the controller into the command function and then enter the appropriate command.

The only problems at first were setting the parameters correctly for the various modes and getting the threshold (sensitivity) control set properly for vhf packet operation. I was able to operate vhf packet, but when other stations tried to digipeat through my unit it would "bomb" out. The threshold control had been adjusted according to the operating manual. Finally after several days of trying to change around packet parameters, I called the factory service department and got the straight poop on how to set it up right.

Although it is nice having one box that can do many things, it does have some drawbacks. It can operate many modes, but only one at a time. So you

cannot be monitoring vhf packet or acting as a digipeater while you are operating some other mode on hf. This would not be a problem for most operators who do not leave their packet stations up on a 24 hour basis.

Another compromise is that on hf bands, the controller uses a 200 hz. frequency shift rather than the standard 170hz. This has not seemed to be a real problem. There has been no difficulty working RTTY or AMTOR, and none of the stations worked have complained about it.

If you are considering purchasing the PK232 or just want to find out more about packet radio, RTTY, or AMTOR, feel free to give me a call for more detailed info and/or opinions.

73's Jim WA9ABB

VE Test Results - 16 May 87

TEST	1A	1B	1C	2	3A	3B	4A	4B
GIVEN	4	5	4	5	13	5	1	2
PASSED	2	3	2	2	5	3	1	2
% PASSED	50	60	50	40	38	60	100	100

TOTAL TESTS GIVEN = 39
TOTAL TESTS PASSED = 20
% PASSED = 51

UPGRADES Ext-1 Adv-2 Gen-3 Tech-3

Total = 9
TOTAL ATTENDED = 26
% UPGRADES = 38

CONGRATULATIONS to the following on their recent upgrade or new license:

Name	Call	Before	Upgraded
George Beauchamp	WØLMM	Advan	Extra
Michael Sparling	WØLVW	Advan	Extra
Richard Kile	WB7THT	General	Advan
Benjamin Cooper	NØHFY	Tech	Gen
Frank Kaltenstein	KAØYEM	Novice	Gen
George Lewis	NØHXT	Tech	Gen
Gene Albert		Unlic	Tech
Ronald Morris	KAØZHO	Novice	Tech
Ronald Stroud	-----	Novice	Tech

submitted by Pete NØLA

AGREED ?
by Bud NØDDF

If there is one thing that most of us can agree on, it is that we disagree.

Being disagreeable isn't all that bad. If Columbus had agreed with the "wise" men of his time, the capital of Ohio might be Toledo. So if you choose to disagree, feel free. It really can't hurt and it might help. "But", you say, "nobody will like me if I'm disagreeable", to which I reply, "It's not what you do, but how you do it".

What am I about to be disagreeable about? The use of "Q" signals! I feel, as do some others, that Q signals were meant to be used for CW except when their use in voice communications is clearer than plain English, i.e., QSL when you want the other ham to know that you intend to send a QSL card or would like one. To use QSL to mean "Roger", "I acknowledge", or "your radio appears to be working", is akin to saying "10-4, good-buddy".

Now that I have pointed out what I think is a problem, I will offer two possible solutions (three if we leave it alone). One, go back to the intended use of Q signals or, two, adopt the following new Q signals in order to enrich our ham mystique so that the rest of the world doesn't know what we are talking about.

Signal Meaning

QLT	Let's talk (to be used at the start of a QSO)
QSC	Short Chat
QGC	We Got us a Convoy (thanks to KOTER)
QGD	Going to Dinner (also QSB, QSL, and QBS)
QTF	Ten-Four (to give QSL a break)
QML	My Location (in lieu of "Home QTH where I live")
QTS	Throwing the Switch (similar to QRT but for voice only)
QMN	My Name is
QMR	My Rig is
QMH	My QMN is
QHD	My Home QTH is (see QML)

As you can see, the possibilities are endless. We need not limit ourselves to these few, in fact, we need several hundred if we are to achieve our goal of

making ham radio seem "mysterious" thereby scaring away all prospects. I welcome your suggestions. Perhaps this could lead to the formation of an "Amateur Radio Redundancy Legion".

80.5 (halfway between 73 and 88)
Bud NØDDF

Teller County Hill Climb

Spring brings the Open Wheelers and the Stocks to Teller County for some of the fastest and most exciting racing of the season. Again this year Doc WØNCT organized our participation in this fun event.

Saturday May 30, 1987 - Qualifications

NCS	Doc	WØNCT
Ck Pt 2	Phil	VE1ARC
Ck Pt 3	Harvey	W1JU
Ck Pt 4	Jim	WAØTAV
Finish	Bill	WB7TDN

Sunday May 31, 1987 - Race Day

NCS	Doc	WØNCT
Ck Pt 1	Thom	NEØH
Ck Pt 2	Jerry	KEØBR
Ck Pt 3	Malcolm	KE9S
Ck Pt 4	Harvey	W1JU
Ck Pt 5	Jim	WAØTAV
Finish	Don	WDØBSZ

Product Review

Yaesu FT-23R meter Handitalkie
by Jim WA9ABB

The FT23-R is one of those new "small" two meter h.t.'s that have appeared on the ham market in the past year. Exactly how small depends on what options are purchased with the h.t. The plain vanilla version with the standard 600 mah battery pack measures 2.2x5.5x1.3 inches and weighs 0.9 lbs(430 grams). The h.t. can be made even smaller with the 200 mah optional battery pack, but operating time would be greatly reduced. The rig gets longer when the high power battery pack and/or optional touch tone pad are added. Size wise it is close to the new Kenwood and Icom micro h.t. s.

In standard configuration the little rig puts out 2.5 watts/200mw from 144 to 148 mhz. There are 10 memories, and all functions are controlled by a microprocessor. Programing and operation of the microprocessor is as usual, sometimes confusing. A small wallet size quick reference card is supplied. A liquid crystal display is used to show the memories and other functions. One possible problem is that there is no backlight provided for night operation.

A very simple modification allows the h.t. to operate from 140 to 164 mhz. It involves desoldering a bridge on the main circuit board. But I warn you it takes a steady hand, small soldering iron tip, and strong magnifying lens to accomplish this. This should not be attempted by those with little experience working on subminiature circuits.

One of the best features is an automatic power save system which reduces battery consumption by turning the receiver on for 300 millisec and off for 600 millisec when the channel is clear and the squelch is closed. The batteries seem to last twice as long as any other h.t. I've owned.

The standard battery pack comes with a cube recharger and requires 14 hours to recharge. Suggested options are an extra battery pack and the NC-29 drop-in fast charger. The fast charger recharges in five hours then switches to a trickle charge mode.

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The FT23-R has been in service for about one month and I am happy with it. It is a fine little rig for the money and I would readily recommend it to any of my friends. If you want to take a look at it, catch me at one of the Saturday breakfasts or the next club meeting.

73's Jim WA9ABB

MINUTES OF MAY GENERAL MEETING submitted by Al N8CMW, secretary

The general meeting of the Pikes Peak Radio Amateur Association was held at Giuseppe's Old Depot Restaurant, Wednesday evening 13 May 1987. The meeting was called to order by the president Don KE9BJ at 19:30. Don asked the 62 members and 13 guests to introduce themselves by name, call, and when and how they became a ham. The longest licensed ham present was Bill Lange, W1THA. The minutes of the previous general meeting and board meeting were approved as printed in O-Seat.

Committee Reports

Notes: Anyone wishing to help out on any of these committees, please contact the chairman at the phone number listed. Thank you for your support.

Treasurer - Bud N8DDF (599-7699):
Previous balance \$1143.71, income \$634.50, expenses \$352.62, May 13 balance \$1425.59.

Interference - Ron NK8P (593-8352):
No interference this month.

SwapFest - Jim WA9ABB (598-7543):
Sales of tickets about \$150. behind last year. Have \$1000. worth of prizes. Need help setting up tables Friday evening at 17:00.

Pikes Peak Hill Climb - Malcolm KE9S (488-2071): 39 signed up but need more help. Training classes will run from Jun 16 to Jun 26 every other day. Jun 20 will be at 2 PM, others at 7 PM. Will be mailing out applications to those who have signed up or who contacted him.

Education - Les KC9NC (634-3995):
Tech/General class completed, graduates

plan to take test during VE testing at the Swapfest. 5-6 inquiries about a novice class.

Publicity - Rick WB7THT (599-7655):
Nil

Colorado Council of Amateur Radio Clubs
(CCARC) - Bud NØDDF (599-7699): Nil

Deaf and Blind School - Jim WA9ABB
(598-7543): Nil

Teller County Hill Climb - Doc WØMCT
(596-4216): 30-31 May, need volunteers.

Ø-Beat - Phil VE1ARC (590-7136):
Thanks to all contributors, especially
the quick report from the Dayton
Hamvention.

ARES - Jim WASSKK: (579-9129)
Has ARES applications. ARES meets every
Wed night on the 146.37/97 repeater at
19:00 MDT.

Public Service - Mike KØTER (636-1290):
Nil

Club Trailer - Pete NØLA (495-4829):
Cargo door blew off and has been replaced
with a new hinge.

Field Day - Max KDØEL (UL):
Telephone Tom ADØD (495-2788) who will
relay. Meeting 3 Jun at KDØEL's house at
6580 Snowbird at 7 PM. Need trailers for
operating stations. Got site from forest
service. Sent ARRL application. Will use
club call WAØVTU.

VE Testing - Pete NØLA (495-4829):
Passing the liaison between the VE and
VEC among the VE's. Testing will be done
at SwapFest, next one in Aug.

Picnic - Doug NØHJT (488-0559):
Picnic will be on Aug 2 at the Air Force
Academy picnic grounds across from the
stadium.

Climb for Life - Les KCØNC (634-3995):
Norm Steinbeiser of the Pikes Peak
Jaycees is Chairman. He gave some
details. Also present was Karen Dwyer,
President. It is a 14 mile climb up Barr
Trail on 29 Aug, proceeds to St Jude
Hospital in Memphis, Tenn. Need
volunteers for communications. T-shirts
to volunteers.

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TAB BOOKS

Enduro! Need chairman.

Old Business: Nil

New Business:

Warren, WØYNE announced that the
forest service wants to charge \$1000./yr
for repeater sites. Suggest writing a
letter to officer in charge protesting
this for service-oriented repeaters.

Jake, NØCYR presented to Shannon
KAØZHP for her sister Sherry (who was at
home with two broken arms) an assistant
cook badge for Field Day.

Jerry, KEØGR needs two volunteers for
Volksmarch on Sat May 23 at Fox Run Park.

Prizes - Ron NKØP:

Winners were:

WØYNE	Warren	\$10. Centennial
NTØA	Bob	ARRL Handbook
NØGYW	Karl	\$10 Wintronics
WDØBF2	Don	3 raffle tickets
KØØGI	Faye	year a membership
WJØU	Harvey	pass
NØBYJ	-----	Computer cable
KEØGJ	Don	Loax

AA0L	Ray	0 db amplifier
KA0ZHN	Leighton	Coax from OEM
N0HJT	Doug	Cable from OEM
KA0ROZ	Jody	Antenna
KA0ZHN	Leighton	Callbooks

Program:

Bill McKay, K0RZ from the Microwave Society presented a talk on 10 GHz and Above. He described the bands and the operation on the microwave frequencies, and gave a good description of the equipment that is required and available. Overall, an excellent presentation on a little known subject by someone who is obviously keenly dedicated to these modes and frequencies. Thanks Bill.

The meeting was adjourned at 2145. The next meeting will be 10 June

MINUTES OF MAY BOARD MEETING submitted by Al N0CMW

The board meeting was held on Monday 18 May at the home of Phil VEIARC. Meeting was called to order by Vice President NK0P do to the absence of the President. Those present were Chris NX0E, Ron NK0P, Bud N0DDF, Phil VEIARC, and Al N0CMW.

Synthesizer for the Q&Q SCHOOL ICOM 730 has been ordered, and when it arrives, it will require interfacing with the rig. Club now has an ARRL number 1575. Secretary was requested to get some initial and renewal applications from ARRL.

Chris NX0E has info on emergency antenna for HF. He was authorized to purchase the HF antenna and a push-up mast if he can not get a mast by other means. Need at least one more generator for Field Day for the VHF station. Have the 2nd club generator and will try the 350 watt generator that belongs to Ron NK0P. President Don KE0BJ will get with Mike K0TER on the Endura. PHIL VEIARC was authorized to increase the 0-BEATS to 200 an increase of 30. The club will furnish most of everything for the picnic.

We had a gripe on the SwapFest from the Mail Manager do to an unfortunate incident, this is being handled by the

SwapFest committee. Treasurer reported money from SwapFest which is not a final accounting as follows \$865.00. Last year was \$1008.00. Prizes cost more this year plus the flyers to all local hams who were not members of PPRAA.

The board wishes to than Jim WA9ABB and Ron NK0P for a very nice SwapFest. Board also wishes to thank all members and non members who helped set up and tear down the tables, plus all who helped in numerous ways, such as Barb, Carolyn, Eleanor KB2BAJ who sat there selling tickets. I also want to thank Frances KA0ITC who answered the telephone at the N0CMW QTH while I was out in Dayton and other times I was not available, and to Bud N0DDF who had to make numerous trips Sat to put our money in the bank. There were others that we know we have forgotten. THANKS TO ALL.

Next board meeting will be at Chris NX0E QTH on June 15.



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We will be closed the following dates for Hamfests:

June 4-8 Loveland, CO
June 11-15 Levelland, TX
June 18-22 Grand Junction, CO
June 27-29 Boss' Birthday Field Day
July 4-5-6 No plans — CALL
July 10-12 Douglas, WY
July 16-20 East Glacier, MT (will be closed
July 10-24 for Douglas & East Glacier. Will
return for Woodland Park Hamfest July 24-27)

Due to Hamfest season, we are not running a product listing this month - we have (or can get quickly) nearly all ham equipment advertised by major companies and distributors in current ham catalogs and magazines and most at lower prices. If you call and get our answering machine, please leave your name and number and a message up to 1 minute long - we get them daily and will call you back, or if you leave an order and your address, we'll ship it that day or next.

Some specials on New Equipment

Kenwood TM221A - 2 meter FM 45 W rcv from 138-174 MHz
Xmit modifiable for CAP & MARS - special sale price \$345 w/TTM
Kenwood TM421A - 70 cm 35 W \$359.
Kenwood TM2530 - \$349.
Kenwood TM2550 - \$379.
Kenwood 2470 - \$449.
Kenwood TS440S w/AT - \$1020.
Kenwood TS430S - \$700.
Icom 28H - Now with TTM - Sale \$398.
Icom 28A - Now with TTM - Sale \$390.
Icom 735 - Sale \$790.
KLM complete Oscar package at near 1986 prices.
Yaesu FT 767GX - \$1425.
Yaesu FT757GX - \$785.
Yaesu FT727R - 2M/70 cm HT - \$398.
Yaesu FT23R - \$265.
Kantronics KAM - \$275.
MFJ 1274 VHF/HF Packet Controller \$145.

Prices subject to change without notice.

Not responsible for errors on account of amateur involvement

Thanks for your support, — Jess KQTAA

We'll look forward to seeing you at one of the hamfests!

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Additional Names _____ Call _____ Class _____

Associate Member \$8.00 ☐ (Outside Teller & El Paso Counties.)